The Role of Multiple Cues in Category Formation and the Development of the Weak Verb Classes in Medieval German and English

GLAC 14, University of Wisconsin-Madison

May 3, 2008

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Standard account (1)

- Merger of unstressed vowels in transition to 'Middle' period led to loss of weak-verb class distinctions in the present tense in both English
- Cl. 1 *senden* < OE *sendan* vs.
- Cl. 2 *enden* < OE *endian*;
- and High German
- Cl. 1 *wischen* < OHG *wisken* vs.
- Cl. 2 *vischen* < OHG *fiskôn*

Standard account (2)

- Classes 1 and 2 remained distinct in both languages in the past tense, where Class-2 verbs (along with a few short-stem verbs of Class-1) had a "connecting vowel" before the dental suffix:

- ME: Cl. 1 *sende* vs. Cl. 2 *end**e**de*

- MHG Cl. 1 *wischte* vs. Cl. 2 *visch**e**te*

Why this is interesting:

- Word-and-paradigm prohibition on lexical diacritics to determine inflectional class membership:

  - "The key premise of any WP model is just that some set of forms smaller than a whole paradigm will suffice to identify the class of a lexeme."

  - Wherever "no set of leading forms smaller than a whole paradigm is sufficient to identify the class [...]. The forms of each paradigm must [...] be listed in full, [...]" (Blevins 2004:58; cf. Wurzel, Gerken)

Hypothesis:

- As soon as the 2 main weak verb classes become indistinguishable in most present-tense forms, one class must cease to behave as a "regular" inflectional class. Past tense forms of verbs in this class must be stored in the lexicon. Behavior will show hallmarks of irregularity (cf. Pinker, Clahsen, etc.)

Refinements to the standard account (1): MHG

- Hard to find empirical support for the claim that Class-2 verbs were significantly more likely than phonologically similar class-1 verbs to have a connecting vowel in the past tense, e.g.:

- BMZ and Lexer dictionaries list 31 tokens of finite past forms of class-1 *meinen* w/ no connecting vowel vs. just 1 with *-e-*; but class-2 *weinen* looks similar: 34 tokens with no vowel vs. just 3 with *-e-*, and all 15 tokens of class-2 *dienen* lack the connecting vowel.

Refinements to standard account (2): Middle English

- Mossé (73): "The weak verbs are divided into two categories according to whether […] the dental suffix was or was not preceded by the vowel *-e-*.

- (79, fine-print "remark"): "Certain Southern and South-western dialects maintained the endings in OE weak verbs of class II particularly well."

Refinements to standard account (2): Middle English

- Clear and consistent maintenance of the class distinction is found in the majority of the material that we have from 1st half of ME period:

- Sample of 9459 pre-1350 weak-verb tokens from MED reveals:

- In relevant present forms of class-2+:

- **1064** tokens with i/y/...; **512** without

Dialect variation in early ME

- Southern and some West Midlands texts have very consistent retention of *i* in present:

- **570** tokens with *i*; **49** without

- East Midlands and Northern texts have very consistent loss of *i*:

- **5** tokens with *i*; **191** without

Past-tense forms in ME

- Unlike MHG, the class distinction is maintained very well in English through 1350:

- Cl.-1-long: **155** with -V-; **1303** without

- Cl.-2+: **707** with -V-; **103** without

Present-past connection?

- Is there any relation between retention of *i* in the present and consistent maintenance of class distinction in the past?
- South/West texts:
- Cl. 1-long: **39** with -V-; **492** without
- Cl. 2+: **254** with -V-; **36** without
- North/East texts:
- Cl. 1-long: **28** with -V-; **173** without
- Cl. 2+: **67** with -V-; **11** without

Class transfers in North/West (1)

- 9 of the 11 Class-2+ past-tense forms with no connecting vowel in the North/ West texts are:

- -all 3 tokens of each of:

- *lernen* ʿlearnʾ

- *rêven* ʿrobʾ

- *birin* ʿbehooveʾ

Class transfers in North/West (2)

- *lernen* and *rêven* look like typical cases of irregularization:

- There were several phonologically similar class-1 verbs that would have tended to attract them into that class (*dernen, wernen, yernen, lêven, drêven*)

- Aside from the 19c innovation *knelt*, *learnt* and *(be)reft* are the only irregular weak past forms in modern English from OE class-2 weak verbs.

Tentative conclusions (1):

- The loss of the *i* in the present tense of the Class-2+ verbs in ME was a profound change that inevitably led to a reorganization of verbal inflection in English.
- From the moment of this loss, we can no longer speak of 2 <u>regular</u> verbal inflectional classes.
- In accordance with word-and-paradigm principles, the class-1 verbs necessarily became <u>irregulars</u> with stored past-tense forms.

Tentative conclusions (2):

- The irregular (stored) status of the former long-stem class-1 verbs explains why they have long been prone to either:
- 1) regularize; or
- 2) retain irregularities arising through phonotactic effects (*kept, sent, hid, bled, meant*, etc.)
- The remnants of class-1 (the irregular weak verbs) still survive today with essentially the same status that they had for Orm in the 12th century.

Comments on method (1)

- Online dictionaries such as the OED, MED and the various major historical dictionaries of German based in Trier offer new opportunities for partially automated construction of large databases.

Comments on method (2)

- Basic procedure (using a language such as Perl):

- 1) Automatically retrieve any number of entries from the online dictionary; take advantage of HTML tags to help parse entries, store output in a text database file.

- 2) Coding that cannot be fully automated can be greatly sped up using a scriptable text editor.

- 3) Data analysis can also be done with Perl, or files can be imported into Spreadsheet, Statistics package, etc.

References (1)

Blevins, James P. 2003. Stems and Paradigms. Language 79.737-767.

Blevins, James P. 2004. Inflection Classes and Economy. Explorations in Nominal Inflection, ed. by Gereon Müller, Lutz Gunkel, and Gisela Zifonun, 41-85. New York: de Gruyter.

Blevins, James P. 2006. Word-based morphology. Journal of Linguistics 42.531-573.

Blevins, Juliette. 2004. Evolutionary Phonology. New York: Cambridge U.P.

BMZ = Mittelhochdeutsches Wörterbuch. Mit Benutzung des Nachlasses von Georg Friedrich Benecke ausgearbeitet von Wilhelm Müller und Friedrich Zarncke. 5 vols. Stuttgart: S. Hirzel 1990. [Reprint of Leipzig ed., 1854-1866.] (http://germazope.uni-trier.de/Projects/ WBB/woerterbuecher/bmz/wbgui)

Bybee, Joan L. and Carol Lynn Moder. 1983. Morphological Classes as Natural Categories. Language 59.251-270.

Clahsen, Harald. 1999. Lexical entries and rules of language: A multidisciplinary study of German inflection. Behavioral and Brain Sciences 22.991-1060.

Clahsen, Harald. 2006. Linguistic Perspectives on Morphological Processing. Advances in the theory of the lexicon, ed. by Dieter Wunderlich. Berlin: Mouton de Gruyter.

Gerken, LouAnn. 2005. Decisions, decisions: infant language learning when multiple generalizations are possible. Cognition 98(3).B67-B74.

References (2)

Marcus, Gary F. Ursula Brinkmann, Harald Clahsen, Richard Wiese, and Steven Pinker. 1995. German Inflection: The Exception That Proves the Rule. Cognitive Psychology 29.189-256.

Mossé, Fernand. 1968. A Handbook of Middle English, 5th printing. Baltimore: Johns Hopkins Press.

MED = Middle English Dictionary (online). 2001. Ann Arbor: Regents of the University of Michigan. (http://quod.lib.umich.edu/m/med/)

OED = Oxford English Dictionary Online. 2005. New York: Oxford U.P. (dictionary.oed.com)

Paul, Hermann. 1989. Mittelhochdeutsche Grammatik, 23rd ed. by Peter Wiehl und Siegfried Grosse. Tübingen Niemeyer.

Pinker, Steven. 1999. Words and Rules. New York: HarperCollins.

Pinker, Steven and Alan Prince. 1988. On language and connectionism: analysis of a parallel distributed processing model of language acquisition. Cognition 28.73-193.

Wurzel, Wolfgang Ullrich. 1989. Inflectional Morphology and Naturalness. Boston: Kluwer. [Translation of Wurzel 1984]